Claim 38 calls for assaying a sample taken from an infected subject, at two distinct points in time. In the first assay, the method calls for determination of anti-NS3 antibodies, and a negative result. At a second point in time, an assay is carried out, also for anti-NS3 antibodies, and this time the results are positive.

With respect to the references, as has been pointed out in prior responses, the Japanese reference shows that, by using NS3 as the binding partner, it is possible to improve antibody recognition. There is no indication within this reference that one could use NS3 in two steps, leading to recognition of a change in a subject's status.

The Beach reference, which deals with chimpanzees, expressly states of the results:

> "This is in contrast to a human study in which the major response was against the core protein."

See Beach at 234, second column. Note that the study Beach refers to is the Vallari paper relied upon by the examiner. Hence, one must conclude, from Beach's own statements, that correlation to humans is not to be contemplated.

Vallari based seroconversion on a first set of tests for c100. See page 552, second column:

> "Fourteen patients who were shown by a commercially available screening test for antibodies to recombinant c100 antigen to have seroconverted to anti-HCV . . ."

Hence, Vallari did not carry out two tests for antibodies to NS3.

Given the teachings of Beach and Vallari, who expressly state that (i) results in chimpanzees are not correlatable to humans, and (ii) that seroconversion in humans was based on an initial assay for c100 specific antibodies, one is hard pressed to see how claim 38 is suggested by the combination. Withdrawal of the rejection is believed proper, and is urged.

Adding Schuurs to the cited references does not change this. Schuurs teaches various immunoassay formats, but dos not correct the failings in the three primary references.

Turning to the rejections of claim 27, and dependent claims 28-36, it is believed that new claims 39 and 49 are free of the failing alleged to be present in claim 27, and hence the rejection under 35 USC §112 should be withdrawn.

With respect to the applicability of the Japanese reference, in addition to their argument made previously applicants note that the Vallari reference discredits the view that the Japanese reference shows that NS3 antigen can be used to determine seroconversion. Review of the

Japanese reference shows that a mixture of c33 and c100 antigens were used (see page 13 of the translation). The reference does not allow one to determine to what antigen the antibodies bound. Vallari expressly teaches the use of c100 for an initial determination of the antibodies, and Beach warns against using the chimpanzee results for determining seroconversion in humans. Given the Japanese reference, which must be interpreted in light of the other references, one falls short of finding a suggestion of assaying for NS3 specific antibodies to determine seroconversion.

In view of the foregoing, withdrawal of the rejections, and allowance of claims 39-49 are believed proper and is urged.

Respectfully submitted,

FULBRIGHT & JAWORSKI L.L.P.

By _____
Norman D. Hanson
Reg. No. 30,946

666 Fifth Avenue
New York, NY 10103

VIA FACSIMILE
I hereby certify that this correspondence is being facsimile transmitted to the Commissioner of Patents and Trademarks, Washington, D.C. 20231 on February 28, 2003.
Fulbright & Jaworski L.L.P.

HUBR 1067.3 (10105485) - NDH

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s)	:	Christoph Seidel, et al.
Serial No	:	09/896,032
Filed	:	June 29, 2001
For	:	METHOD FOR DETERMINING EARLY HCV SEROCONVERSION
Art Unit	:	1648
Examiner	:	D. C. Wortman

February 28, 2003

Hon. Commissioner of Patents
and Trademarks
Washington, D.C. 20231

SHOWING OF CHANGES

Claim 38: A method for determining seroconversion in a human subject infected with hepatitis C virus, comprising: (i) incubating a sample taken from said subject, with a first solid phase bound polypeptide, and a second, labeled polypeptide which is in solution, wherein the amino acid sequence of said first and second polypeptides are found in hepatitis C virus protein NS3 region, said incubation being carried out under reducing conditions, to determine binding of a hepatitis C virus specific antibody to both of said first and second polypeptides, and (ii) comparing results from (i) to results obtained at a previous point in time from said subject which were negative for presence of [HCV antibody] antibodies to hepatitis C virus protein NS3 region, wherein a difference in (i) as compared to results obtained from said patient at previous point in time which were negative is indicative of seroconversion.

Respectfully submitted,

FULBRIGHT & JAWORSKI L.L.P.

By _____
Norman D. Hanson
Reg. No. 30,946

25266516.1